

REMARKS

This is intended as a full and complete response to the Office Action dated April 6, 2007, having a shortened statutory period for response set to expire on July 6, 2007. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-44 are pending in the application. Claims 1-44 remain pending following entry of this response. Claims 1, 17, 22, 38, 43, and 44 have been amended. Applicants submit that the amendments and new claims do not introduce new matter.

Specification Objections

The Examiner has object to the specification on the basis that claims 22 and 38 recite the limitations of “a computer readable storage medium” which Examiner believes is not specified in the specification. Applicants believe, as required by MPEP § 608.01(o), that that claimed subject matter is apparent from the descriptive portion of the specification with clear disclosure as to its import.

A person having ordinary skill in the art, would understand what a computer readable storage medium is and recognize that examples of a computer-readable storage medium are disclosed in, at least, Application at paragraph 37. Paragraph 37 of Application gives examples of a computer readable media, including a CD-ROM, a floppy disk, a hard disk drive, etc. Furthermore, the cited section of the MPEP does not require the exact wording of the claim to be disclosed but only that “the meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import”. See MPEP § 608.01(o) (emphasis added). Clearly, a person of ordinary skill in the art would find the meaning of “a computer readable storage medium” to be apparent and supported from, at least, paragraph 32. (Also, it should be noted that MPEP § 608.01(o) is permissive rather than mandatory, as indicated by the use of “should” rather than “must”.)

Claim Rejections - 35 U.S.C. § 101

Claims 1, 17, 22, 38, 43, and 44 are rejected as the Examiner believes the claimed invention is directed to nonstatutory subject matter. Applicants have amended claims 1, 22, and 43 to recite the merging of a first and second column which is stored in the database. Similarly, Applicants have amended claims 17, 38, and 44 to recite the limitation of storing a value representing a degree of correlation between, at least two columns, in the database. In both sets of claims, Applicants submit that the storage of the value or column in the database produces a useful, concrete, and tangible result. Accordingly, Applicants respectfully request that this rejection be withdrawn.

The Examiner also rejects claims 1, 22, and 43 as not producing useful, concrete, and tangible results when the condition ("only if . . .") is met or not. However it is clear that when the condition is met, as explained above, the third column is stored in the database and this is a useful, concrete, and tangible result. If the condition is not met, then no merge will occur. Thus, in this event data values that should not be merged together, because the columns are not correlated, then such data values, are not, in fact, merged. Clearly identifying whether data from two columns should, or should not, be merged, or should not be merged, is useful, concrete and tangible.

Claim Rejections - 35 U.S.C. § 102

Claims 1-44 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Sandler et al.* (hereinafter "Sandler").

Applicants respectfully traverse this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Regarding claims 1, 22, 43:

In this case, *Sandler* does not disclose “each and every element as set forth in the claim”. For example, *Sandler* does not disclose a “method for identifying correlated columns from database tables” that includes, “upon determining the first and second columns are correlated, merging the first and second columns to create a third column that contains each data value stored in the first and second columns.” Claims 22 and 43 recite similar limitations. The Examiner argues that *Sandler* discloses merging a first and second column at Figure 18A and paragraph 0235, lines 7-15. However, the cited section does not teach the merging of two columns into a third column that contains the values of the first and second column.

Instead, at paragraph 0235, lines 7-15, *Sandler* teaches that data values from two columns may be combined through the use of a SUM operation. That is, a data from one column may be mathematically added to a data value from another column. As shown in Figure 18A (cited by the Examiner), the result of this combination is a target table which has a column aggregating the values added together from the two original columns. This is not the method recited in claim 1, of generating a third column that contains the values of the first and second column. In the target table shown in Figure 18A, it is not possible to see any of the individual data values that were in the two original columns shown in the source table. Therefore, the method disclosed in *Sandler* is not the same as that recited in amended claim 1, where the third column contains each of the values from both of the original columns.

Accordingly, for all the foregoing reasons, individually and collectively, Applicants submit that *Sandler* does not disclose a method, computer-readable storage medium, or system that includes all the limitations recited by claims 1, 22, and 43, and therefore, respectfully requests that this rejection be withdrawn.

Regarding claims 2-16 and 23-37:

Claims 2-16 and 23-37 each ultimately depend from one of claims 1 or 22. As Applicants believe the above remarks demonstrate that the base claims are allowable, Applicants believe that the respective dependent claims are also allowable, and allowance of these claims is respectfully requested.

Furthermore, the Examiner cites to *Sandler* at paragraph 18, lines 6-9, as disclosing the limitation, as recited in amended claims 2 and 23, of “determining a correlation value indicating a degree of correlation between the first and the second column and determining whether the correlation value exceeds a predetermined threshold”. However, that section of *Sandler* does not disclose a predetermined threshold for a correlation value but in fact discloses the determination of whether the number of log entries is above a predetermined threshold. As explained in *Sandler* at paragraph 6, lines 4-8, a log entry simply keeps track of what changes are being made to an index. This has nothing to do with determining a correlation value between two database columns and comparing that value to a predetermined threshold. For this reason and the other reasons cited above, it is clear that *Sandler* does not disclose all the limitation recited in claims 2 and 23.

Regarding claims 17, 38, and 44

Claim 17 recites a limitation of “determining a degree of correlation between at least two columns using the determined metadata and the analyzed content”. Claims 38 and 44 recite a similar limitation. The Examiner suggests that *Sandler* discloses the computing of a degree of correlation between the columns using the determined metadata and the analyzed content at paragraph 0235, lines 8-15, and paragraph 0251, lines 3-10. The Examiner also suggests that *Sandler* discloses metadata for columns in the database at paragraph 0056, lines 3-10. However, neither of those cited sections disclose using the metadata in order to compute a value corresponding to the degree of correlation between two columns.

At paragraph 0235, *Sandler* discloses a method of combining two columns by finding matching key values in the two columns and combining the respective data by

using the SUM operation. The cited passage section makes no use of a correlation value and furthermore does not disclose using metadata to compute such a correlation value. In fact, that cited section describes the content of tables, i.e., the actual data in the tables, being used to find matches and to combine the columns and makes no mention of metadata. Amended claim 17 recites the limitation of using analyzed content AND metadata. At paragraph 0251, Sandler discloses a method to identify which database tables are affected by edits done to the database. Once again, the cited passage makes no use of a correlation value and furthermore, does not use metadata or analyzed content to compute such a correlation value. Instead, at paragraph 0251, lines 1-10, *Sandler* clearly involves identifying tables that were affected by edits. There is no disclosure of correlation values computed using metadata and analyzed content.

Accordingly, for all the foregoing reasons, Applicants submit that *Sandler* does not all the limitations recited by claims 17, 38, and 44, and therefore, respectfully requests that this rejection be withdrawn.

Regarding claims 18-21 and 39-42:

Claims 18-21 and 39-42 each ultimately depend from one of claims 17 or 38. As Applicants believe the above remarks demonstrate that the base claims are allowable, Applicants believe that the respective dependent claims are also allowable, and allowance of these claims is respectfully requested.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted, and
S-signed pursuant to 37 CFR 1.4,

/Gero G. McClellan, Reg. No. 44,227/

Gero G. McClellan
Registration No. 44,227
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)